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WATER SUPPLY OUTLOOK FOR OREGON



U.S. DEPT. OF AGRICULTURE
NATIONAL ARCHIVES
JUN 24 1974
PRESENT SECTION
CURRENT SERIAL RECORDS

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

**OREGON STATE UNIVERSITY and STATE ENGINEER
of OREGON**

Data included in this report were obtained by the agencies named above in cooperation with Federal, State and private organizations listed inside the back cover of this report.

AS OF
JUNE 1, 1974

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

*Cover Photo: Snow Surveyors near Ship Creek,
Alaska snow course.*

SCS PHOTO A-172-11

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 511 N. W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	204 E. 5th. Ave., Room 217, Anchorage, Alaska 99501
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR OREGON

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

JUNE 8, 1974

Issued by

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ADMINISTRATOR
SOIL CONSERVATION SERVICE
WASHINGTON, D.C.



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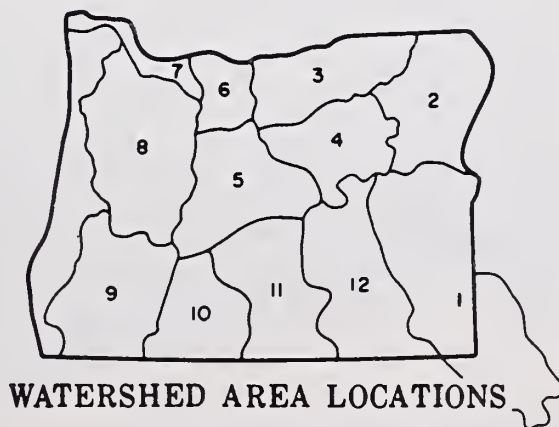
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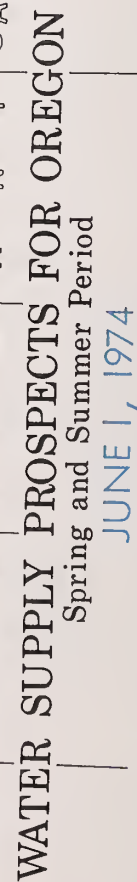
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WATER SUPPLY OUTLOOK for OREGON

JUNE 1, 1974

Water supplies during 1974 will be excellent throughout most of the State. The June 1 snow-pack is 3 to 4 times normal at higher elevations. Major irrigation reservoirs are full and streamflow has been exceptionally good over the entire state.

SNOW COVER

The June 1 snowpack is 3 to 4 times normal with 15 snow courses setting records along the crest of the Cascades and Northeastern Oregon. Cool weather delayed the snow melt, and much of the high elevation snow remains from May 1.

PRECIPITATION

Rainfall during May was near normal in the northwest portion of the state and considerably below normal throughout the remainder of Oregon.

RESERVOIR STORAGE

Twenty-five major irrigation reservoirs are currently storing 3,016,400 acre feet of water. This is 94 percent of capacity and 118 percent of average.

STREAMFLOW

Even though the snowmelt was less than what would normally occur during the month, streamflow was above normal. Streams are expected to continue producing good amounts as the remainder of the snow cover melts.

Representative revised May-September forecasts are as follows:

continued on next page -

continued--

<u>STREAM</u>	<u>FORECAST</u> <u>% of 1958-72 Average</u>
Owyhee Net Inflow	107
Umatilla at Pendleton	167
Grande Ronde at La Grande	174
Mid. Fk. Willamette at Oakridge	133
Rogue at Raygold	126
Upper Klamath Lake Net Inflow	125

This report contains data furnished by the Oregon State Engineer, U. S. Geological Survey, NOAA National Weather Service, and other cooperators.



JUNE 1, 1974

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS		THIS YEAR		PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
OWYHEE, MALHEUR WATERSHEDS					
Malheur near Drewsey	48	150	May-July		32
	49	148	May-Sept.		33
Malheur, North Fork at Beulah ^d	48	137	May-July		35
	53	132	May-Sept.		40
Owyhee Reservoir net Inflow ^k	170	108	May-July	118	157
	193	107	May-Sept.	145	180
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS					
Bear near Wallowa ^d	75	129	May-Sept.		58
Burnt near Hereford ^d	27	196	May-July		13.8
	28	189	May-Sept.		14.8
Catherine near Union	68	128	May-Sept.		53
Eagle Creek abv. Skull Creek	224	148	May-July		152
	242	145	May-Sept.		166
Grande Ronde at La Grande	158	172	May-July	34	92
	167	174	May-Sept.	35	96
Hurricane near Joseph	55	123	May-Sept.		44
Imnaha at Imnaha	327	129	May-Sept.		253
Lostine near Lostine	153	131	May-Sept.		117
Powder near Sumpter	57	142	May-July		40
	59	143	May-Sept.		41
Wallowa, East Fork near Joseph ^d	11.5	135	May-July		8.5
	14.3	134	May-Sept.		10.7
UMATILLA, WALLA WALLA, ROCK, LOWER JOHN DAY WATERSHEDS					
Birch Creek at Rieth	8.0	112	May-July		7.1
Butter Creek near Pine City	5.0	141	May-July		3.4
McKay near Pilot Rock	10.0	114	May-Sept.		8.8
Umatilla near Gibbon	64	163	May-July		39
	70	155	May-Sept.		45
Umatilla at Pendleton	116	170	May-July		68
	122	167	May-Sept.		73
Walla Walla, South Fork near Milton	54	142	May-July		38
	70	137	May-Sept.		51
UPPER JOHN DAY WATERSHEDS					
Camas Creek near Ukiah	17.6	108	May-July		16.2
	17.9	107	May-Sept.		16.7
John Day, Middle Fork at Ritter	80	119	May-July		67
	85	121	May-Sept.		70
John Day, North Fork at Monument	448	132	May-July		340
	468	132	May-Sept.		354
Strawberry near Prairie City	7.9	121	May-July		6.5
	8.2	113	May-Sept.		7.2

JUNE 1, 1974

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
UPPER DESCHUTES, CROOKED WATERSHEDS					
Beaver Creek near Paulina	5.3	120	May-July		4.4
	5.5	120	May-Sept..		4.6
Crane Prairie Reservoir Total Inflow	92	144	May-July		64
	152	145	May-Sept.		105
Crescent at Crescent Lake ^d	22	141	May-July		15.6
	27	138	May-Sept.		19.6
Crooked near Post	50	156	May-July		32
Deschutes at Benham Falls ^d	361	129	May-July		281
	556	118	May-Sept.		471
Deschutes below Snow Creek	100	178	May-Sept.		56
Deschutes, Little near La Pine ^d	92	174	May-July	17.3	53
	108	171	May-Sept.	25	63
Ochoco Reservoir net Inflow	13.0	141	May-Sept.		9.2
Odell near Crescent	35	152	May-Sept.		23
Squaw near Sisters	61	132	May-Sept.	30	46
Tumalo near Bend ^d	54	140	May-Sept.	27	39
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Hood River near Tucker Bridge	300	160	May-July		188
	368	157	May-Sept.		234
Hood, West Fork near Dee	135	155	May-July		85
	168	153	May-Sept.		107
White below Tygh Valley	186	236	May-July	31	79
	196	207	May-Sept.	43	94
LOWER COLUMBIA WATERSHEDS					
Columbia at The Dalles ^d	98,000	128	May-July	47,028	76,822
	116,000	127	May-Sept.	57,890	91,430
Sandy River near Marmot	330	145	May-July		227
	396	140	May-Sept.		282
WILLAMETTE WATERSHEDS					
Clackamas at Estacada	617	138	May-July	237	447
	750	133	May-Sept.	343	562
Clackamas above Three Lynx	490	143	May-July		343
	618	140	May-Sept.		440
McKenzie at McKenzie Bridge	439	134	May-July		329
	616	130	May-Sept.		474
McKenzie near Vida	993	138	May-July		720
	1270	134	May-Sept.		947
McKenzie, So. Fork near Rainbow ^d	216	154	May-July		140
	257	152	May-Sept.		169
Oak Grove Fork above Power Intake	121	137	May-July		89
	167	131	May-Sept.		128
Row near Dorena	63	119	May-July		53
	68	117	May-Sept.		58
Santiam, North at Mehama ^d	707	143	May-July		493
	801	133	May-Sept.		600
Santiam, South at Waterloo ^d	446	138	May-July		323
	510	134	May-Sept.		382
Willamette, Mid. Fk. blw. N. Fk. nr Oakridge	638	138	May-July		462
	745	133	May-Sept.		562
Willamette, No. Fk. of Mid. Fk. near Oakridge	157	130	May-July		121
	175	124	May-Sept.		141
Willamette at Salem ^d	3300	126	May-July		2619
	3900	123	May-Sept.		3165

JUNE 1, 1974

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
ROGUE, UMPQUA WATERSHEDS					
Applegate near Copper	103	127	May-July		81
	110	126	May-Sept.		87
Clearwater above Trap Creek ^d	67	118	May-Sept.		57
Fourmile Lake net Inflow ^d	4.5	150	May-July		3.0
	4.6	148	May-Sept.		3.1
Hyatt Reservoir net Inflow ^d	3.8	173	May-July		2.2
Illinois River near Kerby	83	91	May-July		91
	87	90	May-Sept.		97
Little Butte, N. Fk. at Fish Lake nr. Lake Cr. ^d	14.6	126	May-Sept.		11.6
Little Butte, S. Fk. near Lake Creek	20	124	May-July		16.1
	22	120	May-Sept.		18.4
Rogue above Prospect	245	133	May-July		184
	315	132	May-Sept.		239
Rogue, South Fork near Prospect ^d	57	124	May-July		46
	70	125	May-Sept.		56
Rogue at Raygold near Central Point	650	132	May-July	302	493
	815	126	May-Sept.	434	648
Rogue at Grants Pass	785	125	May-Sept.		627
Umpqua, No. blw. Lemolo Res. nr. Toketee Falls ^d	192	139	May-Sept.		139
KLAMATH WATERSHEDS					
Clear Lake Reservoir Inflow ^k	15.0	99	May-Sept.	17.0	15.1
Gerber Reservoir Inflow ^k	3.9	82	May-Sept.	2.0	4.8
Sprague near Chiloquin	190	114	May-Sept.		166
Upper Klamath Lake net Inflow ^k	440	125	May-Sept.	219	353
Williamson below Sprague River	360	125	May-Sept.		287
LAKE COUNTY, GOOSE LAKE WATERSHEDS					
Chewaucan near Paisley	72	128	May-July		56
	76	127	May-Sept.		60
Deep above Adel	49	114	May-July	26	43
	51	113	May-Sept.	28	45
Drews Reservoir net Inflow ^d	9.0	92	May-July		9.7
Honey Creek near Plush	11.6	103	May-July	6.1	11.3
	11.7	103	May-Sept.	6.3	11.4
Silver Creek near Silver Lake	5.0	74	May-July		6.8
	5.1	71	May-Sept.		7.2
Twentymile near Adel	13.0	121	May-July	7.1	10.7
	13.1	118	May-Sept.	7.4	11.1
HARNEY BASIN WATERSHEDS					
Donner und Blitzen near Frenchglen	34	90	May-July		37
	37	89	May-Sept.		42
Silver near Riley	4.5	88	May-July		5.1
Silvies River near Burns	36	109	May-July	10.0	33
	37	106	May-Sept.	10.6	35
Trout Creek near Denio	5.8	100	May-July		5.8
	6.2	100	May-Sept.		6.2
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBK records. (m) Average for 5 or more years in base period.					

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72 adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBK records. (m) Average for 5 or more years in base period.

JUNE 1, 1974

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average i
OWYHEE, MALHEUR WATERSHEDS				
Antelope	70.0	60.7	27.3	46.7 ^m
Beulah Reservoir	60.0	58.1	33.4	49.0
Bully Creek	30.0	27.6	15.6	21.4 ^m
Owyhee	715.0	691.7	693.1	549.9
Warm Springs	191.0	186.1	108.0	136.2
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS				
Phillips Lake	73.5	75.4	47.9	- -
Thief Valley	17.4	17.4	16.3	16.7
Unity	25.2	25.7	18.3	22.8
Wallowa Lake	37.5	26.1	13.2	30.2
UMATILLA, WALLA WALLA, WILLOW, ROCK LOWER JOHN DAY WATERSHEDS				
Cold Springs	50.0	49.9	36.4	47.8
McKay	73.8	67.7	31.7	60.7
UPPER DESCHUTES, CROOKED WATERSHEDS				
Crane Prairie	55.3	51.7	36.3	38.0
Crescent Lake	86.9	89.0	90.3	54.3
Ochoco	47.5	45.3	23.0	35.9
Prineville	153.0	153.1	144.8	146.0 ^m
Wickiup	200.0	183.9	145.1	165.9
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS				
Clear Lake (Wasco)	11.9	9.0	5.8	5.8
WILLAMETTE WATERSHEDS				
Blue River	85.6*	78.6	76.5	- -
Cottage Grove	30.0*	28.7	28.5	27.3
Cougar	155.2*	141.5	133.8	141.2 ^m
Detroit	299.9*	272.1	233.3	281.1
Dorena	70.5*	64.7	65.8	64.3
Fall Creek	115.0*	107.1	108.8	108.1 ^m
Fern Ridge	94.2*	95.2	85.9	89.5
Foster	30.0*	25.4	24.7	24.6 ^{tn}
Green Peter	270.0*	243.9	238.3	250.9 ^m
Hills Creek	200.0*	190.4	179.1	185.6 ^m
Lookout Point	337.2*	284.7	216.4	306.3
Timothy Lake	61.7	59.5	61.7	61.4
*Multiple purpose reservoir--space reserved primarily for flood runoff.				

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
ROGUE, UMPQUA WATERSHEDS				
Emigrant Lake	39.0	36.4	32.6	35.2*
Fish Lake	8.0	7.3	7.2	6.5
Fourmile Lake	16.1	11.2	15.0	11.9
Howard Prairie	60.0	60.6	50.8	48.6
Hyatt Prairie	16.1	16.2	12.6	14.7
*Average for years of record (in base period) after reconstruction.				
KLAMATH WATERSHEDS				
Clear Lake	440.2	371.0	310.5	258.0
Gerber	94.0	84.9	62.7	63.8
Upper Klamath Lake	584.0	556.6	501.3	534.7
LAKE COUNTY, GOOSE LAKE WATERSHEDS				
Cottonwood	8.7	8.7	8.2	7.0*
Drews	63.0	61.0	55.7	53.1
*Average for years of record (in base period) after reconstruction.				
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.				

BASIC DATA SUPPLEMENT 1

JUNE 1, 1974

SNOW

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont (In.)	Water Content (inches)	
				Last Yr.	Ave.
Annie Spring	6/1	113	61.5	3.7	-
Bald Peter	5/30	99	50.8	-	-
Billie Creek Divide	6/5	0	0.0	0.0	0.0 m
Blue Mountain Camp	5/29	0	0.0	0.0	0.0 h
Cascade Summit	5/30	56	27.6	0.0	7.5 m
Clear Lake	5/29	13	6.1	0.0	0.1 h
Clear Lake Experimental	5/29	26	12.4	0.0	0.5 h
Cold Springs Camp	6/5	47	22.8	0.0	13.5 m
Detroit City	5/30	0	0.0	0.0	0.0
Detroit Dam	5/30	0	0.0	0.0	0.0
Diamond-Crater Summit (Rev)	5/30	71	35.2	0.0	14.1 m
Diamond Lake	5/30	35	15.7	0.0	3.2 m
Diamond Lake Junction	5/30	0	0.0	0.0	0.0 m
Fourmile Lake	5/30	10	4.6	0.0	-
High Ridge Pillow*	6/3	49	24.3	-	-
Hogg Pass	5/30	106	56.7	0.0	22.7 m
Hungry Flat	5/28	0	0.0	0.0	0.0 m
Lookout Point Dam	5/30	0	0.0	0.0	0.0 h
Marion Forks	5/30	0	0.0	0.0	0.0 m
McCredie Springs	5/30	0	0.0	0.0	0.0 h
Mill City	5/30	0	0.0	0.0	0.0
New Dutchman Flat	5/28	134	77.2	9.0	40.0 m
Oakridge	5/30	0	0.0	0.0	0.0
Park Headquarters	5/31	161	92.4	16.8	-
Quartz Mountain	5/31	0	0.0	0.0	0.0 m
Racing Creek	5/30	10	4.6	-	-
Railroad Overpass	5/30	0	0.0	0.0	0.0 h
Salt Creek Falls	5/30	6	2.5	0.0	1.1 h
Santiam Junction	5/30	15	8.1	0.0	0.3 m
Still Creek	5/29	78	40.3	0.0	4.6
Still Creek (Alt.)	5/29	82	42.3	0.0	-
Tangent	5/28	18	9.6	0.0	0.0
Timothy Lake	5/31	22	10.3	-	-
Tollgate	5/29	48	27.4	0.0	0.9
Weston Mountain	5/29	0	0.0	0.0	0.0
Whitewater Bridge	5/30	0	0.0	0.0	0.0

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave.
PLEASE NOTE: The following Telemetry readings were published in error and not reported in Appendix 1 of this issue:					
Mt. Hood Test Site					
Previously published	4/30	-	105.9		
Correct Data	4/30	-	107.1		
Saddle Mountain Pillow					
Previously published	3/22	-	16.9		
Correct Data	3/22	-	14.1		
Previously published	5/1	-	2.9		
Correct Data	5/1	-	0.0		

*Manometer reading.

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1958-72, adjusted average. (i) 1958-72, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 2

JUNE 1, 1974

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average i
OWYHEE, MALHEUR WATERSHEDS							
Bear Creek (Nev.)	7800	72	16.8	c			
Big Bend (Nev.)	6700	48	16.7	c			
Blue Mountain Spring	5900	42	16.9	6/3	11.9	11.1	12.8 ^m
Jordan Valley	4390	48	19.3	c			
Mud Flat (Ida.)	5500	48	12.8	c			
Rodeo Flat (Nev.)	6800	42	11.0	c			
Taylor Canyon (Nev.)	6200	48	15.1	c			
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS							
Blue Mountain Summit	5100	36	16.8	5/29	16.2	12.8	15.2 ^m
Dooley Mountain	5430	36	9.2	5/29	5.4	4.8	5.7 ^m
Emigrant Springs	3925	48	22.3	6/6	21.0	19.6	20.7 ^m
Ladd Summit	3730	48	18.9	b		- -	12.1 ^m
Moss Springs	5850	36	25.8	b		14.7	- -
Tollgate	5070	48	23.6	5/29	18.1	14.4	19.4 ^m
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	6/7	13.6	11.0	12.6 ^m
Emigrant Springs	3925	48	22.3	6/6	21.0	19.6	20.7 ^m
Tollgate	5070	48	23.6	5/29	18.1	14.4	19.4 ^m
UPPER JOHN DAY WATERSHEDS							
Battle Mountain Summit	4340	48	13.8	6/7	13.6	11.0	12.6 ^m
Blue Mountain Spring	5900	42	16.9	6/3	11.9	11.1	12.8 ^m
Blue Mountain Summit	5100	36	16.8	5/29	16.2	12.8	15.2 ^m
Derr	5670	24	9.0	5/29	8.9	8.0	8.5 ^m
Marks Creek	4540	36	14.1	6/3	13.0	11.4	13.2 ^m
Snow Mountain	6300	48	16.7	5/31	15.9	15.9	15.7 ^m
Starr Ridge	5150	36	10.6	6/3	10.6	9.7	10.3 ^m
UPPER DESCHUTES, CROOKED WATERSHEDS							
Derr	5670	24	9.0	5/29	8.9	8.0	8.5 ^m
Marks Creek	4540	36	14.1	6/3	13.0	11.4	13.2 ^m
Snow Mountain	6300	48	16.7	5/31	15.9	15.9	15.7 ^m
KLAMATH WATERSHEDS							
Quartz Mountain	5230	48	15.3	6/3	9.9	9.2	9.7 ^m
LAKE COUNTY, GOOSE LAKE WATERSHEDS							
Camas Creek	5720	42	14.5	b		- -	12.6 ^m
Quartz Mountain	5230	48	15.3	6/3	9.9	9.2	9.7 ^m

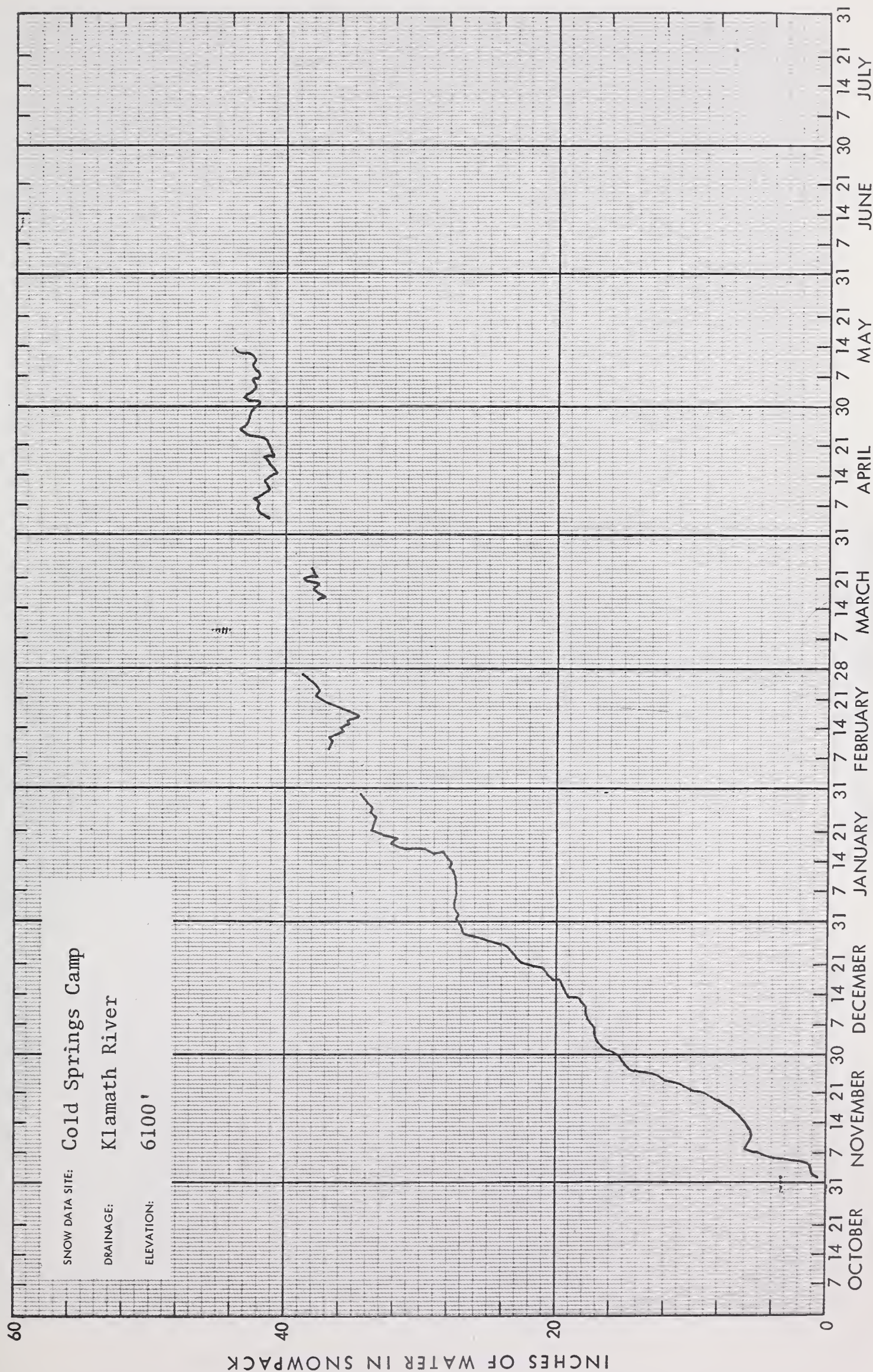
BASIC DATA SUPPLEMENT 2

JUNE 1, 1974

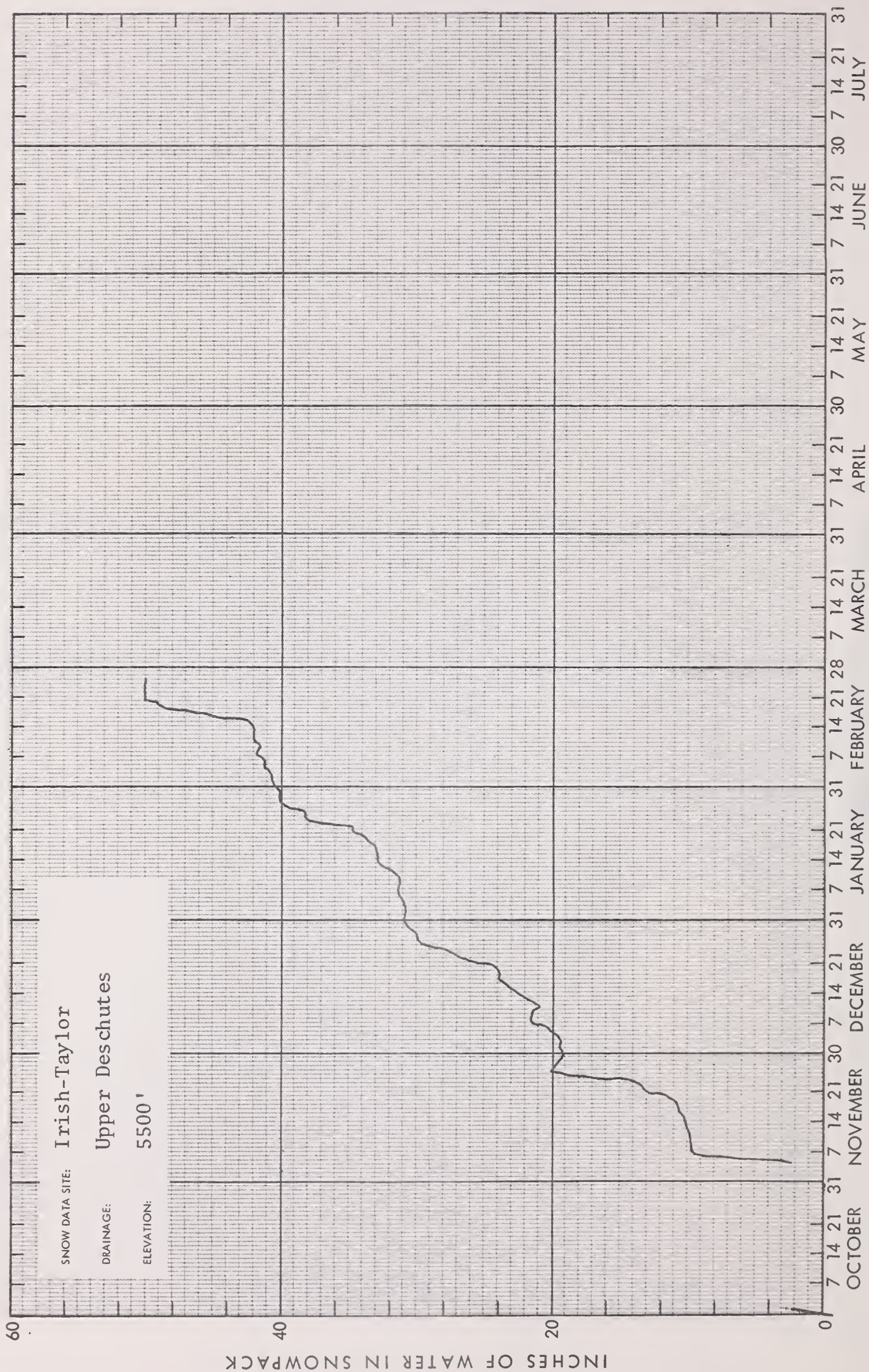
SOIL MOISTURE

[illegible]

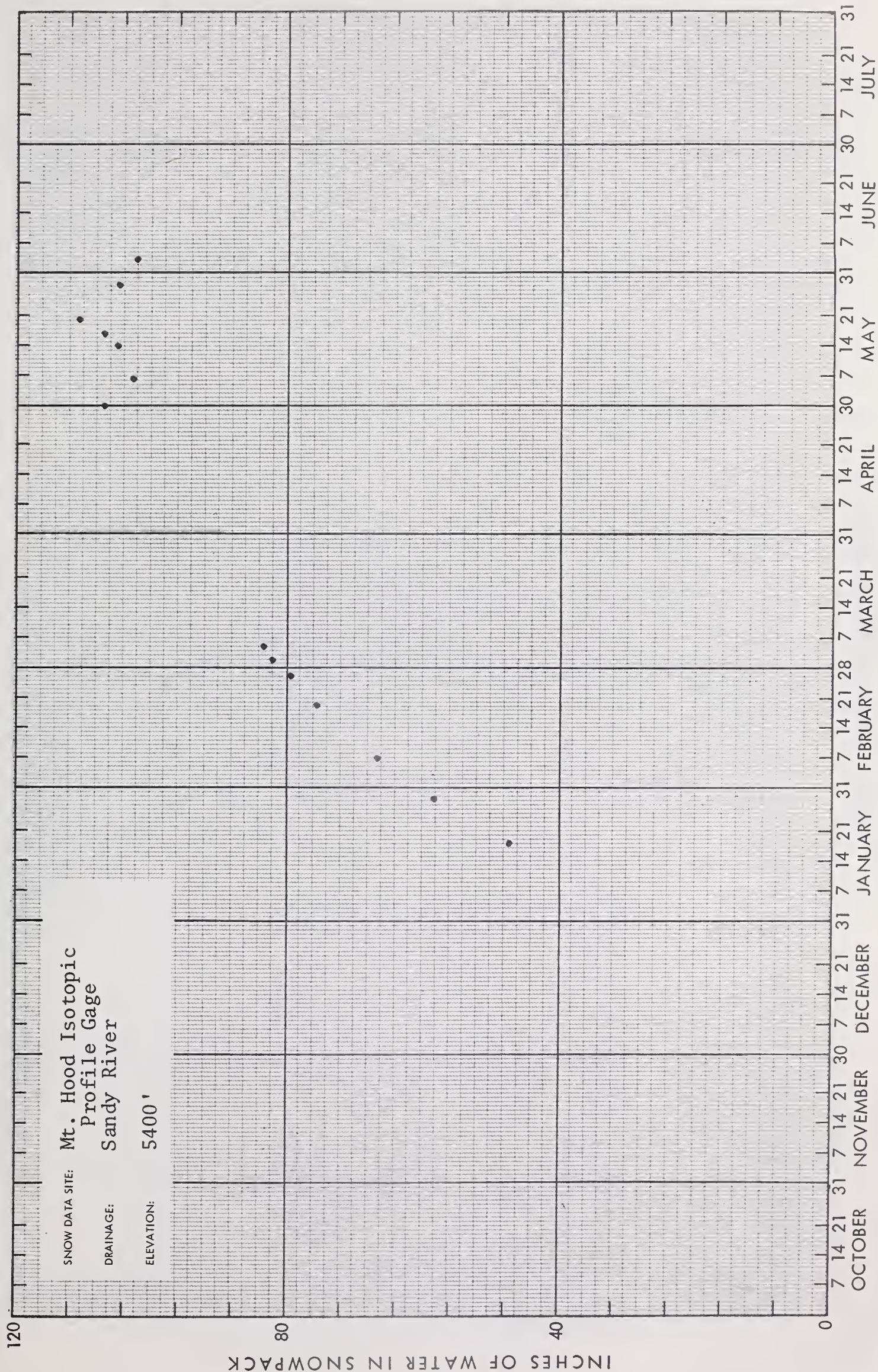
BASIC DATA SUPPLEMENT 4



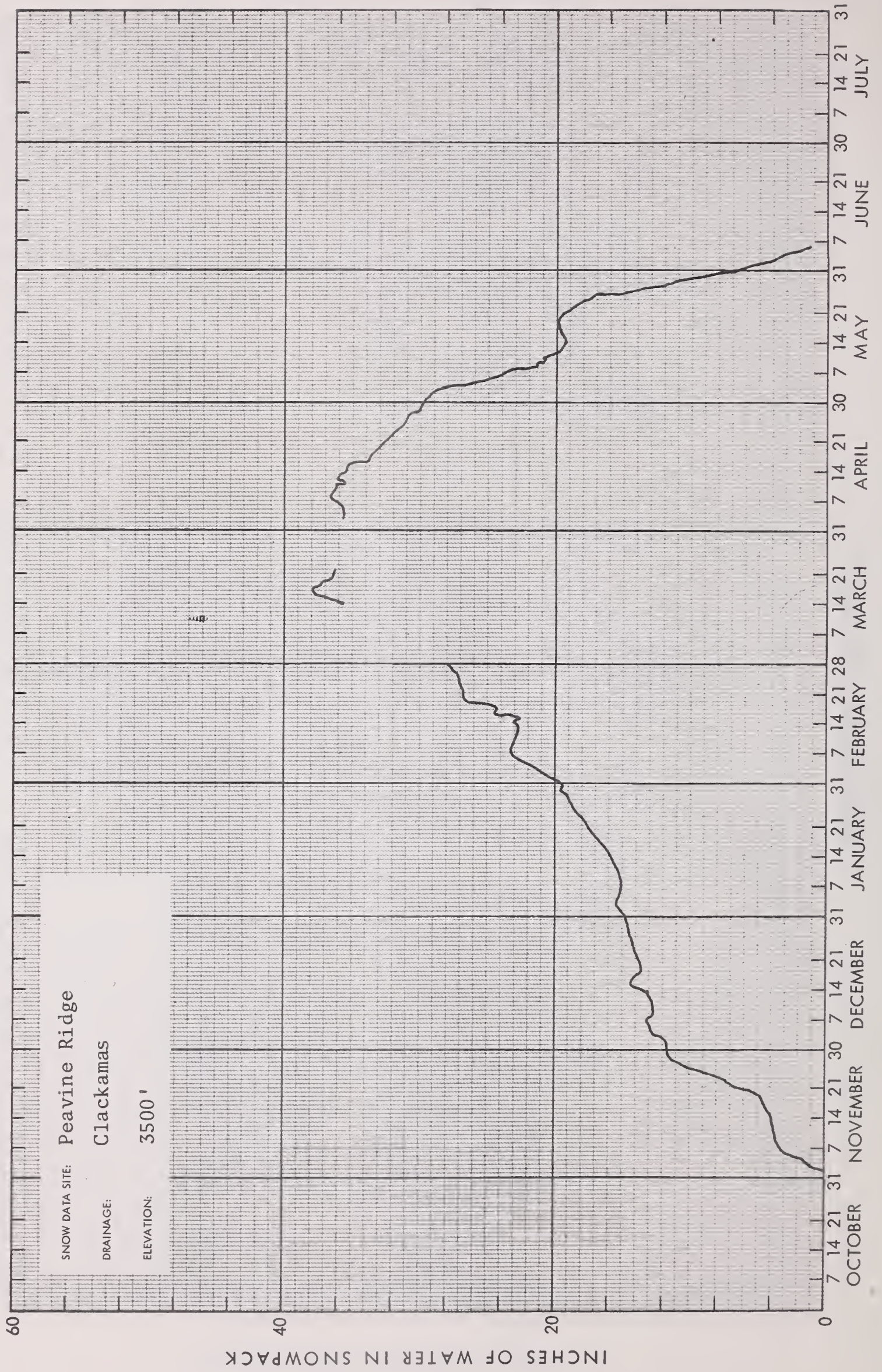
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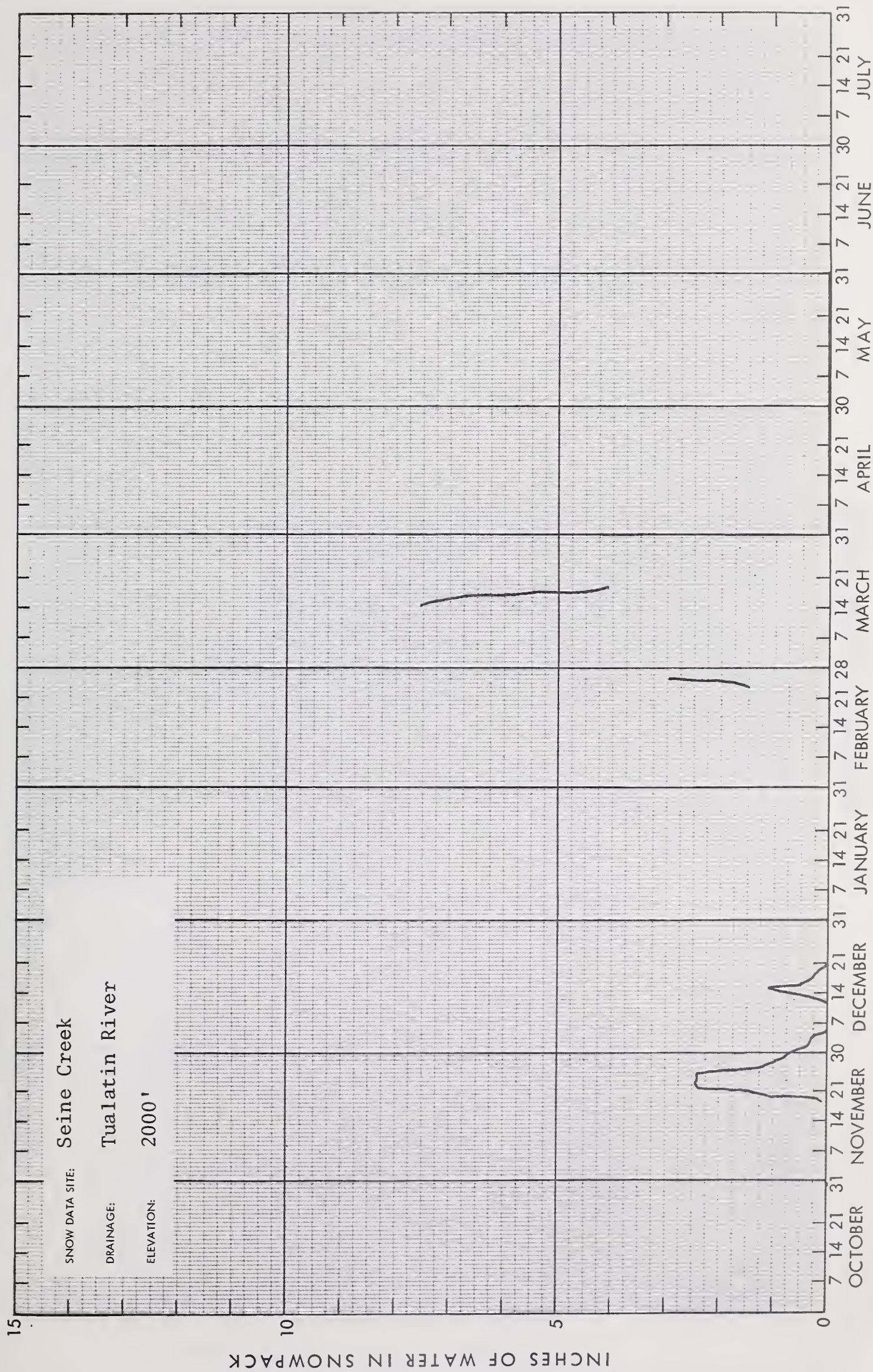
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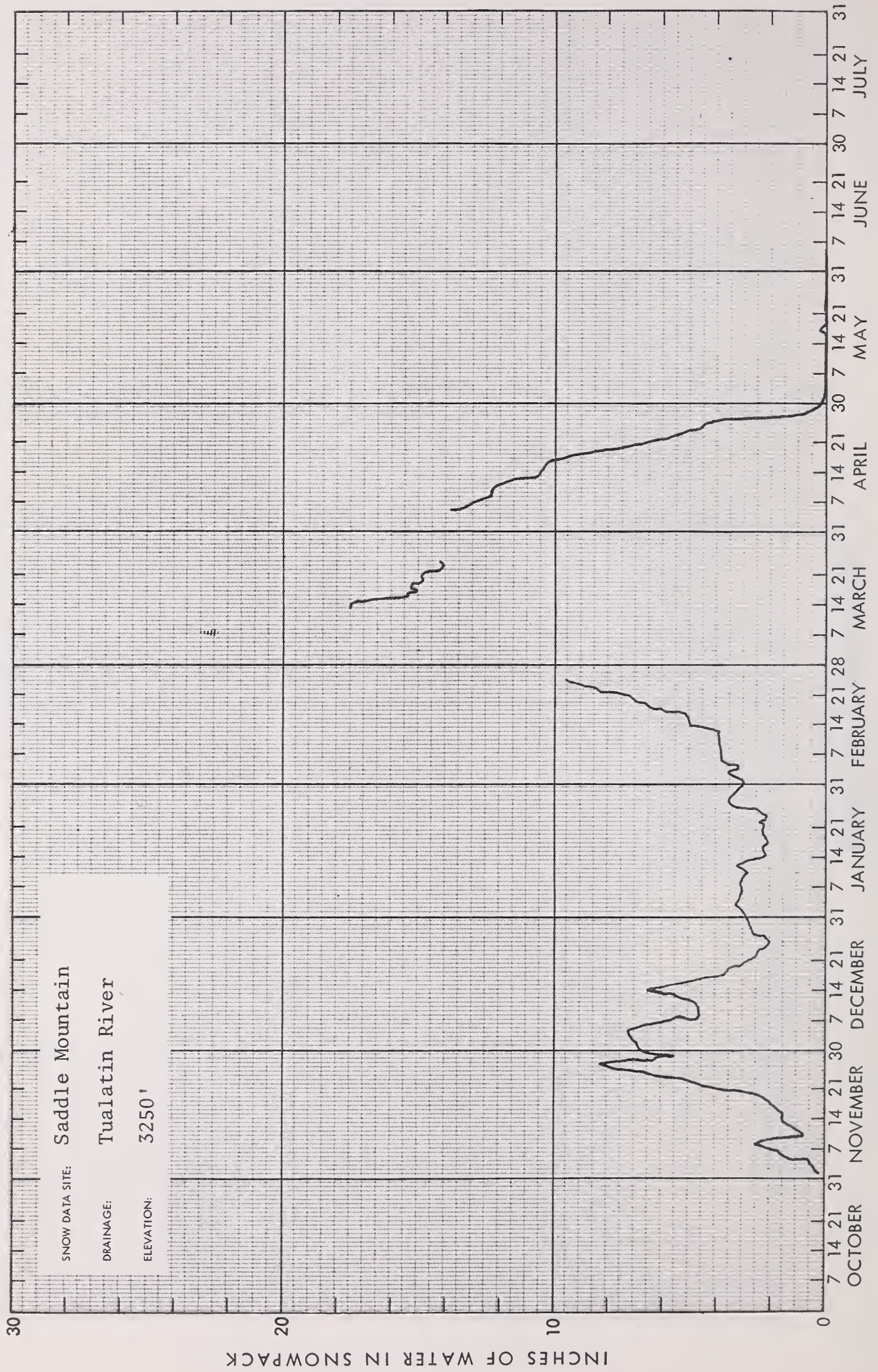
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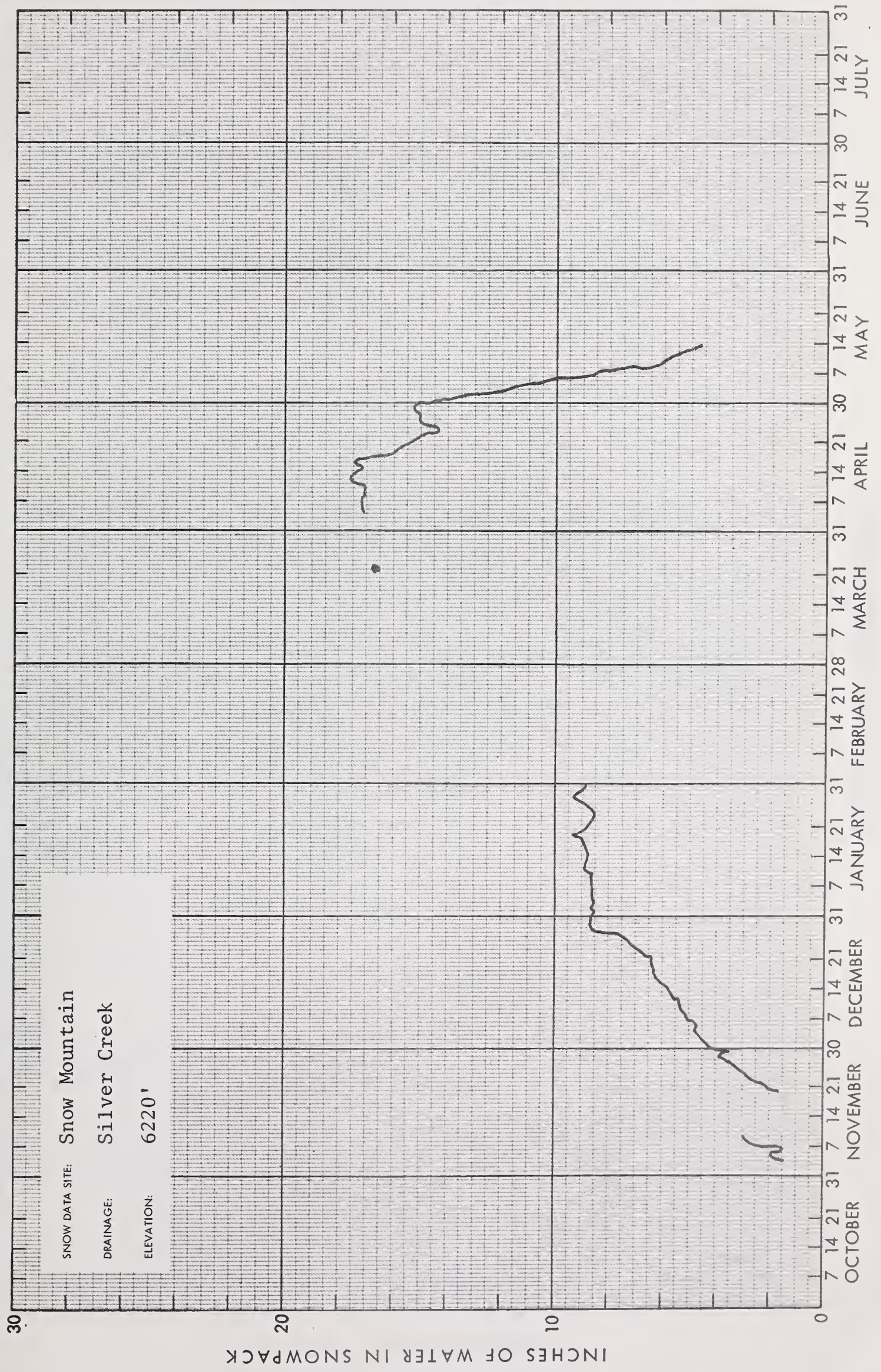
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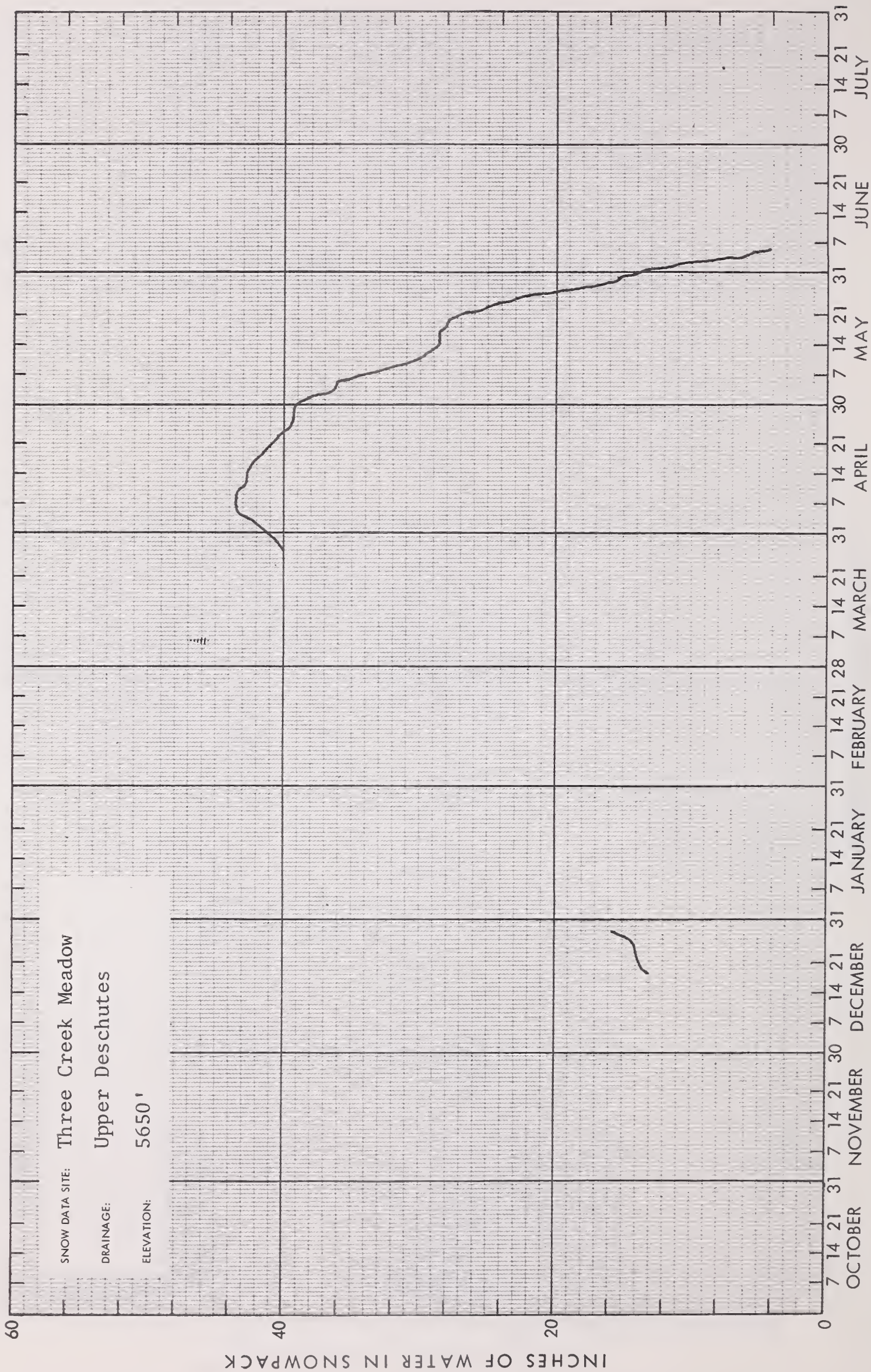
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BASIC DATA SUPPLEMENT 4



BASIC DATA SUPPLEMENT 4



Appendix 1

PREVIOUSLY UNPUBLISHED OREGON SNOW SURVEY DATA 1973-74 Season

<u>SNOW COURSE</u> <u>Name</u>	<u>No.</u>	<u>Date</u>	<u>Depth</u> <u>(In.)</u>	<u>Water</u> <u>(In.)</u>
Bald Peter	21E22	11/30/73	62	18.2
		12/18/73	66	24.4
Battle Creek (aerial)	16G9	3/8/74	24	7.2
Beaver Dam Creek	22G28	11/30/73	21	7.5
Buck Pasture (aerial)	18F6	3/8/74	12	3.0
Buckskin Lake (aerial)	18G8	3/8/74	6	1.2
Bull Basin (aerial)	16G10	3/8/74	10	3.0
Bully Creek (aerial)	18E21	3/8/74	10	2.5
Butte Creek Summit	20E4	11/6/73	17	1.4
		1/10/74	9	1.5
Call Meadow (aerial)	18F7	3/8/74	19	5.7
Cascade Summit	22F3	1/14/74	72	24.3
		2/14/74	89	31.2
		3/13/74	134	46.4
		4/12/74	117	50.2
Champion	22F9	1/14/74	76	33.0
		2/13/74	95	41.2
		3/15/74	140	59.6
		4/12/74	136	62.6
Cooper Spur	21D25	12/15/73	24	7.0
		1/16/74	34	12.8
		2/16/74	42	15.3
Cottonwood-Indian (aerial)	17F2	3/8/74	T	T
Denio (aerial)	18G6	3/8/74	6	1.2
Detroit City	22E1	1/14/74	0	0.0
		2/14/74	0	0.0
		3/15/74	0	0.0
		4/15/74	0	0.0

SNOW COURSE Name	No.	Date	Depth (In.)	Water (In.)
Detorit Dam	22E2	1/14/74	0	0.0
		2/14/74	0	0.0
		3/15/74	0	0.0
		4/15/74	0	0.0
Fawn Meadow (USFS)	21E19A	11/30/73	60	17.3
		3/9/74	134	46.0
		4/16/74	103	44.0
		5/21/74	79	39.5
Fish Creek (aerial)	18G2	3/8/74	69	20.7
Flag Prairie (aerial)	18E26	3/8/74	21	6.3
Gerber	21G4	12/3/73	3	1.0
		2/14/74	1	0.5
		3/15/74	T	T
Golden Curry Creek	22F10	1/14/74	0	0.0
		2/13/74	T	T
		3/15/74	24	8.8
		4/12/74	0	0.0
Hogg Pass	21E6	1/14/74	87	36.9
		2/14/74	120	44.8
		3/15/74	171	64.3
		4/15/74	158	75.5
Hyde Pasture (aerial)	16G5	3/8/74	36	10.8
Indian Creek Butte (aerial)	18E24	3/8/74	93	31.6
Lake of the Woods	22G15	1/11/74	23	7.7
		2/12/74	24	7.0
		3/11/74	44	11.8
		4/11/74	40	12.8
Layng Creek	22F13	1/14/74	0	0.0
		2/13/74	0	0.0
		3/15/74	0	0.0
		4/12/74	0	0.0
Lemiti Meadow	21E18A	3/9/74	110	34.7
		4/16/74	98	39.0 ^a
		5/21/74	27	13.5 ^a
Lionshead (aerial)	21E25	12/4/74	48	12.5
		1/4/74	33	11.3

SNOW COURSE Name	No.	Date	Depth (In.)	Water (In.)
Little Antone (Alt.)	18E30	1/2/74	30	7.0
		1/28/74	27	7.6
		2/26/74	33	9.6
		3/28/74	24	8.2
Logan Valley (aerial)	18E22	3/8/74	28	8.4
Lookout Butte (aerial)	17G6	3/8/74	6	1.2
Lookout Point Dam	22F8	1/14/74	0	0.0
		2/14/74	0	0.0
		3/13/74	0	0.0
		4/12/74	0	0.0
Louse Canyon (aerial)	17G4	3/8/74	36	10.8
Lund Park	22F12	1/14/74	0	0.0
		2/13/74	0	0.0
		3/15/74	0	0.0
		4/12/74	0	0.0
Marion Forks	21E4	1/14/74	34	12.9
		2/14/74	40	16.2
		3/15/74	63	24.3
		4/15/74	47	20.9
McCredie Springs	22F6	1/14/74	0	0.0
		2/14/74	0	0.0
		3/13/74	1	0.1 ^e
		4/12/74	0	0.0
Mill City	22E3	1/14/74	0	0.0
		2/14/74	0	0.0
		3/15/74	0	0.0
		4/15/74	0	0.0
Oakridge	22F7	1/14/74	0	0.0
		2/14/74	0	0.0
		3/13/74	0	0.0
		4/12/74	0	0.0
Olallie Meadow (USFS)	21E20	11/30/73	54	15.5
		2/26/74	121	36.0
Oregon Canyon (aerial)	17G5	3/8/74	21	6.3
Parkdale	21D23	12/15/73	0	0.0
		1/16/74	8	2.8
		2/16/74	0	0.0

SNOW COURSE Name	No.	Date	Depth (In.)	Water (In.)
Power Line	21E21	3/9/74	98	31.4
		4/16/74	99	41.0
		5/21/74	65	32.5
Quartz Mountain	20G6	1/15/74	5	2.5
		2/15/74	4	1.0
		3/15/74	15	4.8
		4/15/74	0	0.0
Quinn Ridge (aerial)	17H6	3/8/74	6	1.2
Racing Creek	21E23	11/21/73	36	2.7
		11/30/73	37	9.6
		12/18/73	32	11.0
Railroad Overpass	22F5	1/14/74	0	0.0
		2/14/74	2	0.2
		3/13/74	15	3.0
		4/12/74	0	0.0
Red Canyon (aerial)	16G11	3/8/74	36	10.8
Red Hill	21D4	3/9/74	180	64.5
Saddle Mountain (Telemetry Station)	23D1	1/15/74		2.3
		2/15/74		5.2
		3/15/74		19.3
		4/15/74		13.1
Salt Creek Falls	22F4	1/14/74	31	12.0
		2/14/74	44	14.7
		3/13/74	77	25.2
		4/12/74	61	24.5
Santiam Junction	21E5	1/14/74	54	23.8
		2/14/74	75	30.5
		3/15/74	116	45.1
		4/15/74	94	45.1
Seine Creek (Telemetry Station)	23D2	3/15/74	-	6.9
		5/15/74	-	0.0
Silver City, Ida. (aerial)	16F3	2/6/74	27	9.0
		3/8/74	51	15.3
Silvies (aerial)	18G1	3/8/74	18	5.4

<u>SNOW COURSE No.</u>	<u>No.</u>	<u>Date</u>	<u>Depth (In.)</u>	<u>Water (In.)</u>
Siskiyou Summit	22G20	1/14/74	8	2.5
		2/14/74	10	2.8
		3/15/74	24	8.1
		4/12/74	7	5.0
Strawberry	20G9	3/17/74	18	5.8
Succor Creek (aerial)	16F6	3/8/74	30	8.4
Timothy Lake	21D17	11/30/74	33	9.1
		5/17/74	54	25.5
Triangle (aerial)	16G4	3/8/74	12	3.0
Trout Creek (aerial)	18G5	3/8/74	36	10.8
Umbrella Falls	21D30	3/9/74	246	85.9
Upper Valley	21D24	1/16/74	12	3.6
		2/16/74	T	T
"V" Lake (aerial)	18G7	3/8/74	31	9.3
Vaught Ranch, Ida. (aerial)	16G12	3/8/74	28	8.4
War Eagle, Ida. (aerial)	16G13	3/8/74	70	21.0
Weaver Creek	22F11	1/14/74	0	0.0
		2/13/74	T	T
		3/15/74	2	0.2
		4/12/74	0	0.0
Weston Mountain	18D17	3/27/74	0	0.0
		4/26/74	0	0.0
Whitewater Bridge	21E3	1/14/74	7	3.5
		2/14/74	3	1.8
		3/15/74	15	6.2
		4/15/74	0	0.0
Whitewater Meadow (Aerial)	21E24	12/4/73	36	9.4
		1/4/74	9	3.1

SOIL MOISTURE
PREVIOUSLY UNPUBLISHED

SOIL MOISTURE STATION Name	No.	Date	SOIL MOISTURE This Year
Battle Mountain Summit	18D12	10/30/73 11/29/73	9.8 12.3
Beech Creek	19E2	6/30/73 7/30/73 8/31/73 10/30/73 11/30/73	14.0 11.2 9.7 10.4 18.2
Blue Mountain Springs	18E16	6/30/73 7/30/73 8/31/73 10/30/73 11/30/73	8.4 5.5 5.2 6.6 11.0
Crane Prairie	18D19	6/30/73 7/30/73 8/31/73 10/30/73	15.7 14.6 14.5 15.1
Derr	19E3	10/29/73	5.3
Dooley Mountain	17E1	10/26/73 11/27/73	2.3 5.5
Emigrant Springs	18D4	10/30/73 11/29/73	12.6 16.2
Ladd Summit	17D12	6/28/73 8/2/73	8.8 7.9
Marks Creek	20E1	10/26/73 11/26/73	8.9 11.2
Moss Springs	17D6	6/28/73 8/2/73	14.2 11.9
Quartz Mountain	20G6	11/19/73 11/29/73	6.8 7.8

SOIL MOISTURE STATION Name	No.	Date	SOIL MOISTURE This Year
Silvies	18G1	6/10/73	15.5
		7/15/73	13.7
		10/15/73	12.6
		3/31/74	15.3
Starr Ridge	19E7	6/30/73	8.0
		7/30/73	7.4
		8/31/73	7.2
		10/30/73	7.5
		11/30/73	10.6
Tollgate	18D3	6/28/73	15.4
Williams Ranch	18E25	6/30/73	2.5
		7/30/73	14.2
		8/31/73	13.9
		10/30/73	14.3
		11/30/73	17.9

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<u>SNOW COURSE</u> <u>Name</u>	<u>No.</u>	<u>Date</u>	<u>Depth</u> <u>(In.)</u>	<u>Water</u> <u>(In.)</u>
Battle Creek (aerial)	16G9			
Previously Published		2/6/74	22	7.3
Correct Data		2/6/74	21	7.0
Beaver Reservoir	18D9			
Previously Published		1/30/74	49	15.5
Correct Data		1/30/74	49	14.7
Big Sheep (aerial)	17D14			
Previously Published		1/28/74	93	33.5
Correct Data		1/28/74	90	32.4
Cooper Spur	21D25			
Previously Published		4/3/74	56	21.1
Correct Data		4/3/74	55	21.2
Hyde Pasture	16G5			
Previously Published		2/6/74	30	9.9
Correct Data		2/6/74	29	9.7
King Mountain #2	23G9			
Previously Published		3/29/74	16	4.6
Correct Data		3/29/74	16	6.4
Silver Burn	22G2			
Previously Published		1/30/74	25	9.7
Correct Data		1/30/74	24	9.5
Tilly Jane	21D7			
Previously Published		2/22/74	141	55.5
Correct Data		2/22/74	143	56.9
Vaught Ranch (aerial)	16G12			
Previously Published		2/6/74	22	7.3
Correct Data		2/6/74	21	7.0

Appendix 2

SNOW SURVEYS AT RADIO TELEMETRY SITES
for Calibration Purposes

<u>TELEMETRY SITE Name</u>	<u>No.</u>	<u>Date</u>	<u>Depth (In.)</u>	<u>Water (In.)</u>
Blue Mountain Springs	18E16	12/26/73	42	10.5
		1/30/74	51	17.5
		2/28/74	63	21.2
		3/29/74	56	23.1
		4/29/74	37	17.2
Fish Creek	18G2	3/1/74	68	23.2
		3/31/74	76	30.0
Irish-Taylor	21F6	4/30/74	151	71.8
Mt. Hood Test Site	21D8	1/15/74	124	49.1
		4/29/74	247	114.0
Silvies	18G1	3/1/74	25	8.5
		3/31/74	30	14.2
Snow Mountain	19F1	1/29/74	33	11.0
		2/27/74	36	9.8
		3/28/74	32	11.0
Summer Rim	20G2	2/27/74	61	20.5
		3/28/74	71	26.0
Three Creek Meadow	21E13	12/21/74	41	14.6
Tipton	18E9	12/28/73	53	13.0
		1/31/74	57	16.5
		2/28/74	62	18.2
		3/28/74	50	20.3
		4/29/74	25	10.7
Willamette Pass	22F14	12/20/73	68	24.5
		1/29/74	98	36.7

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- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY

- Douglas County Water Resources Survey

FEDERAL

- Department of Agriculture
 - Cooperative Extension Service
 - Forest Service
 - Soil Conservation Service
- Department of Commerce
 - NOAA, National Weather Service
- Department of the Interior
 - Bonneville Power Administration
 - Bureau of Land Management
 - Bureau of Reclamation
 - Fish and Wildlife Service
 - Geological Survey
 - National Park Service
- Department of National Defense
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- Pacific Power and Light Company
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- California-Pacific Utilities Company

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- City of La Grande
- City of The Dalles
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- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
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- Squaw Creek Irrigation District
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